

The present invention and the subject matter of Tan et al. are completely different from each other, as Tan et al. concerns an absorbent material which is completely inappropriate as a filter aid, because it sucks up the liquid instead of letting it go through. Furthermore, the absorbent material is swelling so that the passages in the material are closed and no liquid at all can pass. Finally, Tan teaches a blend of cellulosic fibers and a super-absorbent material. As will be explained later, the invention is in no way directed to cellulose.

The claims are directed to a filter aid. Broadly, a filter aid is an insoluble medium retaining fine particles suspended in a liquid but not retaining the liquid itself.

Tan is directed to just the contrary, i.e., an absorbent material the purpose of which is to hold a liquid which has come into contact with the material and not let it go. That is, Tan is directed to an absorbent material containing a blend of cellulosic fibers and a super-absorbent material. These components are essential for the purposes of Tan. Yet both components lead away from the claimed invention, which does not deal with cellulosic fibers, but with wood particles and, of course, does not contain any super-absorbent material, which is just the opposite of a filtering aid.

Indeed, Tan et al. discloses an *absorbent material* to be used as absorbent cores in articles such as disposable diapers, feminine hygiene products and incontinent devices (see column 1, lines 5-10). Hence, absorbency is paramount in Tan et al. This is fundamentally different from filtering out small amounts of material from a large volume of liquid. Clearly, Tan et al. is not directed to producing a filter aid of the nature to which the pending claims are directed. In an effort to develop a filter aid, no person of ordinary skill in the art would look to a reference concerning absorbent materials, which do just the opposite of what a filter aid is intended to do.

Moreover, apart from not disclosing the claimed material, Tan et al. does not provide any disclosure or suggestion of producing a filter aid by removing sensorially active substances from wood particles while leaving "the wood particles as wood particles," as required by independent claim 1.

Hence, for at least those two reasons, applicant respectfully submits that the examiner has not established a prima facie case.

- 2) The rejection of claims 1 to 12 under 35 USC § 103(a) as being unpatentable over Hou et al. '462 in view of Tan et al., is traversed.

The Examiner's position is that "it would have been obvious to treat wood particles to produce cellulose pulp for its use in a filter media sheet in Hou et al. '462."

Hou '462 is dedicated to removing cationic contaminants from beverages. The invention of Hou essentially resides in treating filter elements consisting of cellulose pulp with an amount of inorganic cationic colloidal silica surface charge modifier. The disclosure as an essential element comprises this treatment of cellulose pulp. To assume that the treatment is not necessary and that it should not be cellulose pulp but wood particles, would mean to act contrary to the disclosure of Hou.

Hou et al. '462, further discloses a filter media comprising cellulose fiber as a matrix (see column 3, lines 54 to 64). However, while cellulose can be extracted from wood chips, the claims of the present invention require finely divided wood particles as different from cellulose fibers. It is therefore submitted that the cellulose fibers of the nature used in Hou et al. '462 are no longer wood particles and have been converted to a different material.

Moreover, Tan et al. does not cure the deficiencies of Hou '462, for at least the reasons discussed above concerning Tan et al. Additionally, the examiner has not established a sufficient basis to combine the references. On the contrary, the opposed objects of Hou '462 and Tan would prevent an ordinarily skilled person from considering such a combination. Furthermore, even if combined, the result would not be the subject matter as a whole of the invention defined by the present claims.

Hence, the examiner has not established a prima facie case.

- 3) The rejection of claims 1 to 14 under 35 USC § 103(a), as being unpatentable over U.S. Patent No. 4,488,969 to Hou in view of Tan, is traversed.

Hou '969 teaches to make a self supporting fibrons media sheet from a long, self-bonding structural fiber, to give the sheet sufficient structural integrity in both the wet "as formed," and in the final dried condition.

In case of the present invention, finely divided wood particles are used as a *filter aid* and not to form a *self-supporting fibrons matrix*. It is submitted that the materials are different for at least the reasons set forth above.

Further, the teachings of Hou '969 are such as lead the reader of ordinary skill away from any notion of using wood particles *per se* as a filter aid. A reference must be considered for all it teaches, including disclosures that teach away from the invention as well as disclosures that point toward the invention. *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.* 776 F.2d 281, 227 U.S.P.Q. 657 (Fed. Cir. 1985). In fact, the process which is disclosed in Hou '969 is such that the product would tend to be unsuitable for a filter aid as presently claimed. As established in *re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) - If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.

Moreover, applicant respectfully submits that the examiner has not sufficiently set out the PTO's position with respect to the limitations of each claim, and has not sufficiently established a basis for combining the references. Hence, no *prima facie* case has been made.

- 4) The rejection of claim 1 under 35 USC § 102(b) as being anticipated by or, in the alternative under 35 USC § 103(a), as being obvious over U.S. Patent No. 4,599,240 to Thompson, is traversed.

Rejections under the 35 USC § 102 statute, are based on the premise that to anticipate a claim, each and every element of the claim must be shown in a single reference. When a claimed element cannot be found in the reference, the reference does not anticipate the claimed invention. Further, it is incumbent upon the Examiner to identify where in the reference each element may be found. *Ex parte Levy*, 17

U.S.P.Q.2d 1461 (Bd. Pat. App. Intrf. 1990). Consequently, when the Examiner does not identify a claimed element, the Examiner has not established a *prima facie* case of anticipation.

This rejection is therefore traversed in that the claim calls for wood particles as different from wood pulp to be subjected to treatment with a dilute alkali solution at a temperature below 100°C and at atmospheric pressure, to a degree sufficient to remove the sensorially active substances from the wood particles and leave the wood particles as wood particles.

Thompson is directed to a cellulose food product, which means that the disclosure is fully concentrated to purified powdered cellulose. This is in contrast to the present invention maintaining the presence of wood. Much of the specification of Thompson is concerned with the description of the procedure of obtaining the cellulose product. No ordinarily skilled person would be brought to the understanding that there should still be a wood particle only partly treated. This is contrary to the disclosure of Thompson which deals with only cellulose. Certainly, in column 1, line 61 and column 3, line 36 there is also a mention of a use of the product as filter aid, but this does not lead to the present invention, as it is only said that the product is cellulose and not that it should be a partly treated wood. Just in the opposite in column 4, lines 25-28 it is directly said:

"The process of the present invention is not applicable on a practical basis to wood. . ."

So, also Thompson leads away from the present invention and applicant respectfully submits that the examiner has not established a *prima facie* case.

Thompson discloses a process to provide highly purified cellulose which will satisfy the requirements of human consumption and use. While this highly purified cellulose can be used as filter aid (col. 3, lines 35-36), it is in fact pure cellulose as different from the wood particles from which it was extracted. That is to say, as disclosed at column 3, lines 12-38, only after being converted from the starting material via a number of separations, oxidizations and filterings, is the cellulose material ready for use as a filter aid. In other words, it is no longer the claimed "wood" particles. This

reference therefore not only fails to disclose the claimed wood particles it teaches away from the claimed material and toward one which, due to the purification/treatments, is no longer wood.

Moreover, the examiner has not even asserted, much less established, that a person of ordinary skill would have been motivated to modify Thompson to allegedly arrive at the invention as a whole defined by claim 1.

It is therefore submitted that the Thompson reference does not disclose or suggest the claimed invention, and that there is no *prima facie* case of anticipation or obviousness.

Conclusion

It is submitted that the invention as now claimed is neither anticipated nor rendered obvious by the references which have been cited in this action. Favorable reconsideration and allowance of this application is courteously solicited.

Respectfully submitted,

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